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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/883,069

DATE: 05/07/2002
TIME: 09:58:49

#5

Input Set : A:\883069.txt
Output Set: N:\CRF3\05072002\I883069.raw

```
 3 <110> APPLICANT: Palatin Technologies, Inc.
 4       Shubh, Sharma
 5       Yiqun, Shi
 7 <120> TITLE OF INVENTION: Metallopeptide Combinatorial Libraries and Applications
 9 <130> FILE REFERENCE: 70025
11 <140> CURRENT APPLICATION NUMBER: 09/883,069
12 <141> CURRENT FILING DATE: 2001-06-14
14 <150> PRIOR APPLICATION NUMBER: US 60/112,235
15 <151> PRIOR FILING DATE: 1998-12-14
17 <150> PRIOR APPLICATION NUMBER: PCT/US99/29743
18 <151> PRIOR FILING DATE: 1999-12-14
20 <160> NUMBER OF SEQ ID NOS: 13
22 <170> SOFTWARE: PatentIn version 3.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 4
26 <212> TYPE: PRT
C--> 27 <213> ORGANISM: artificial
29 <220> FEATURE:
30 <223> OTHER INFORMATION: tetrapeptide metal ion binding sequence
32 <400> SEQUENCE: 1
34 Gly Gly Gly Gly
35 1
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 4
39 <212> TYPE: PRT
C--> 40 <213> ORGANISM: artificial
42 <220> FEATURE:
43 <223> OTHER INFORMATION: single-pot metallopeptide library member
45 <400> SEQUENCE: 2
47 Asn Gln Cys Glu
48 1
50 <210> SEQ ID NO: 3
51 <211> LENGTH: 4
52 <212> TYPE: PRT
C--> 53 <213> ORGANISM: artificial
55 <220> FEATURE:
56 <223> OTHER INFORMATION: single-pot metallopeptide library member
58 <220> FEATURE:
59 <221> NAME/KEY: misc_feature
60 <222> LOCATION: (2)..(2)
61 <223> OTHER INFORMATION: Xaa is Trp, HomoPhe, 2'-Nal or Phg
64 <400> SEQUENCE: 3
W--> 66 His Xaa Cys Trp
```

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```
      67 1
      69 <210> SEQ ID NO: 4
      70 <211> LENGTH: 4
      71 <212> TYPE: PRT
C--> 72 <213> ORGANISM: artificial
      74 <220> FEATURE:
      75 <223> OTHER INFORMATION: tetrapeptide message sequence of alpha-MSH
      77 <400> SEQUENCE: 4
      79 His Phe Arg Trp
      80 1
      82 <210> SEQ ID NO: 5
      83 <211> LENGTH: 5
      84 <212> TYPE: PRT
C--> 85 <213> ORGANISM: artificial
      87 <220> FEATURE:
      88 <223> OTHER INFORMATION: melanocortin-receptor specific metallopeptide sequence
      90 <400> SEQUENCE: 5
      92 His Phe Arg Cys Trp
      93 1               5
      95 <210> SEQ ID NO: 6
      96 <211> LENGTH: 4
      97 <212> TYPE: PRT
C--> 98 <213> ORGANISM: artificial
     100 <220> FEATURE:
     101 <223> OTHER INFORMATION: metallopeptide library member
     103 <220> FEATURE:
     104 <221> NAME/KEY: misc_feature
     105 <222> LOCATION: (2)..(2)
     106 <223> OTHER INFORMATION: Xaa is Phelylglycine
     109 <400> SEQUENCE: 6
W--> 111 His Xaa Cys Trp
     112 1
     114 <210> SEQ ID NO: 7
     115 <211> LENGTH: 4
     116 <212> TYPE: PRT
C--> 117 <213> ORGANISM: artificial
     119 <220> FEATURE:
     120 <223> OTHER INFORMATION: metallopeptide library member
     122 <400> SEQUENCE: 7
     124 His Trp Cys Trp
     125 1
     127 <210> SEQ ID NO: 8
     128 <211> LENGTH: 4
     129 <212> TYPE: PRT
C--> 130 <213> ORGANISM: artificial
     132 <220> FEATURE:
     133 <223> OTHER INFORMATION: metallopeptide library member
     135 <220> FEATURE:
     136 <221> NAME/KEY: misc_feature
```

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Output Set: **N:\CRF3\05072002\I883069.raw**

```
      137 <222> LOCATION: (2)..(2)
      138 <223> OTHER INFORMATION: Xaa is HomoPhe
      141 <400> SEQUENCE: 8
W--> 143 His Xaa Cys Trp
      144 1
      146 <210> SEQ ID NO: 9
      147 <211> LENGTH: 4
      148 <212> TYPE: PRT
C--> 149 <213> ORGANISM: artificial
      151 <220> FEATURE:
      152 <223> OTHER INFORMATION: metallopeptide library member
      154 <220> FEATURE:
      155 <221> NAME/KEY: misc_feature
      156 <222> LOCATION: (2)..(2)
      157 <223> OTHER INFORMATION: Xaa is 2'-Naphthylalanine
      160 <400> SEQUENCE: 9
W--> 162 His Xaa Cys Trp
      163 1
      165 <210> SEQ ID NO: 10
      166 <211> LENGTH: 4
      167 <212> TYPE: PRT
C--> 168 <213> ORGANISM: artificial
      170 <220> FEATURE:
      171 <223> OTHER INFORMATION: metallopeptide sequence targeted for human neutrophil
elastase
      173 <400> SEQUENCE: 10
      175 Leu Ser Cys Val
      176 1
      178 <210> SEQ ID NO: 11
      179 <211> LENGTH: 4
      180 <212> TYPE: PRT
C--> 181 <213> ORGANISM: artificial
      183 <220> FEATURE:
      184 <223> OTHER INFORMATION: metallopeptide sequence targerted for human neutrophil
elastase
      186 <400> SEQUENCE: 11
      188 Ile Ser Cys Val
      189 1
      191 <210> SEQ ID NO: 12
      192 <211> LENGTH: 5
      193 <212> TYPE: PRT
C--> 194 <213> ORGANISM: artificial
      196 <220> FEATURE:
      197 <223> OTHER INFORMATION: two cysteine metallopeptide library member
      199 <220> FEATURE:
      200 <221> NAME/KEY: misc_feature
      201 <222> LOCATION: (1)..(1)
      202 <223> OTHER INFORMATION: Xaa is Tyr(But)
      205 <220> FEATURE:
      206 <221> NAME/KEY: misc_feature
      207 <222> LOCATION: (2)..(2)
```

RAW SEQUENCE LISTING
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Input Set : A:\883069.txt
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```
208 <223> OTHER INFORMATION: Xaa is Cys(Trt)
211 <220> FEATURE:
212 <221> NAME/KEY: misc_feature
213 <222> LOCATION: (3)..(3)
214 <223> OTHER INFORMATION: Xaa is an alpha amino acid
217 <220> FEATURE:
218 <221> NAME/KEY: misc_feature
219 <222> LOCATION: (5)..(5)
220 <223> OTHER INFORMATION: Xaa is Cys(StBu)
223 <400> SEQUENCE: 12
```
W--> 225 Xaa Xaa Xaa Phe Xaa
```
226 1               5
228 <210> SEQ ID NO: 13
229 <211> LENGTH: 5
230 <212> TYPE: PRT
```
C--> 231 <213> ORGANISM: artificial
```
233 <220> FEATURE:
234 <223> OTHER INFORMATION: two cysteine metallopeptide library member
236 <220> FEATURE:
237 <221> NAME/KEY: misc_feature
238 <222> LOCATION: (1)..(1)
239 <223> OTHER INFORMATION: Xaa is Tyr(But)
242 <220> FEATURE:
243 <221> NAME/KEY: misc_feature
244 <222> LOCATION: (2)..(2)
245 <223> OTHER INFORMATION: Xaa is Cys(Trt)
248 <220> FEATURE:
249 <221> NAME/KEY: misc_feature
250 <222> LOCATION: (5)..(5)
251 <223> OTHER INFORMATION: Xaa is Cys(StBu)
254 <400> SEQUENCE: 13
```
W--> 256 Xaa Xaa Gly Phe Xaa
```
257 1               5
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 05/07/2002
PATENT APPLICATION: US/09/883,069   TIME: 09:58:50

Input Set : A:\883069.txt
Output Set: N:\CRF3\05072002\I883069.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 2
Seq#:6; Xaa Pos. 2
Seq#:8; Xaa Pos. 2
Seq#:9; Xaa Pos. 2
Seq#:12; Xaa Pos. 1,2,3,5
Seq#:13; Xaa Pos. 1,2,5

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13

VERIFICATION SUMMARY DATE: 05/07/2002
PATENT APPLICATION: **US/09/883,069** TIME: 09:58:50

Input Set : **A:\883069.txt**
Output Set: **N:\CRF3\05072002\I883069.raw**

```
L:27  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
L:40  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:53  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:66  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:72  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:85  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:98  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:117 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:130 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:149 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:168 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:181 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:194 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:225 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:231 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
```